

**UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
WILDLIFE SERVICES**

**FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION**

**An Integrated Wildlife Damage Management Approach
for the Management of White-tailed Deer Damage
In the State of New York**

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA-APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and other government agencies experiencing damage caused by wildlife in the state of New York. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). The WS program has completed an environmental assessment (EA) that analyses the potential environmental effects of a proposal to continue a cooperative, integrated wildlife damage management program for the purpose of reducing white-tailed deer (Odocoileus virginianus) damage to agriculture, property, natural resources, and human health and safety in the state of New York. The EA analyzed the proposed action and other alternatives with respect to a number of issues affecting the human environment. Comments from the public involvement process were reviewed for substantial issues and alternatives which were considered in developing this decision. The EA is tiered to the programmatic Environmental Impact Statement (EIS) for the Wildlife Services Program¹ (USDA 1997).

WS is the Federal program authorized by law to reduce damage caused by wildlife (Animal Damage Control Act of 1931, as amended (46 Stat. 1486; 7 U.S.C. 426-426c); the Rural Development, Agriculture, and Related Agencies Appropriations Act of 1988, Public Law 100-102, Dec. 27, 1987. Stat. 1329-1331 (7 U.S.C. 426c); and the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act of 2001, Public Law 106-387, October 28, 2000. Stat. 1549 (Sec 767). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS uses an Integrated Wildlife Damage Management (IWDM) approach, commonly known as Integrated Pest Management (WS Directive 2.105) in which a combination of methods may be used or recommended to reduce damage. WS wildlife damage management is but one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201).

¹ USDA (U.S. Department of Agriculture), Animal and Plant Health Inspection Service (APHIS), Animal Damage Control (ADC). 1997 (revised). Animal Damage Control Program, Final Environmental Impact Statement. Anim. Plant Health Inspection Serv., Anim. Damage Control. Hyattsville, MD. Volume 1, 2 & 3.

Through the Memorandum of Understanding (MOU) among Cornell Cooperative Extension, NY Department of Agriculture and Markets, NY State Department of Environmental Conservation (NYSDEC), NY Department of Health, and U.S. Department of Agriculture, Wildlife Services has established a cooperative relationship among these agencies (Appendix F of the EA). This MOU authorizes WS "to reduce or control wildlife species detrimental to agriculture, public health and safety, or property" after consultation with the NYSDEC. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

Based on the analysis in the EA, I have determined that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of the proposed action.

Monitoring

The New York WS program will review its impacts on white-tailed deer and other species addressed in the EA each year to ensure that WS program activities do not impact the viability of target and non-target wildlife species. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

Public Involvement

The pre-decisional EA was prepared and released to the public for a 30-day comment period by a legal notice in the *Newsday* (NYC/Long Island), *The Post-Standard* (Syracuse), *Buffalo News*, and *The Albany Times Union* on August 5, 2002. The pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. All comments were analyzed to identify substantial new issues, alternatives, or to redirect the program. One comment letter was received by WS within the comment period supporting the proposed program. All letters and comments are maintained at the New York WS State Office, 1930 Route 9, Castleton, NY 12033-9653.

Affected Environment

This EA evaluates white-tailed deer damage management to reduce damage to agriculture, property, natural resources, and human health and safety on private and public lands in New York.

Impacts to Federally Listed Threatened and Endangered Species

No adverse effects on federally classified T&E species are expected. WS has consulted with the USFWS under Section 7 of the Endangered Species Act (ESA) concerning potential impacts of deer damage management methods on T&E species and has obtained a Biological Opinion. For the full context of the Biological Opinion, see Appendix F of the ADC FEIS (USDA 1997, Appendix F). Based on the conclusions made by USFWS during their 1992 programmatic consultation of WSs activities and subsequent Biological Opinion, it was determined that damage management activities being utilized for white-tailed deer in New York are not likely to adversely affect the T&E species listed in New York. Furthermore, New York WS has determined no effect on those T&E species not included in the 1992 Biological Opinion.

WS wildlife biologists consulted on the Canada lynx with USFWS in Regions 3 and 5 in March 2001. The USFWS (letter from L. Lewis, USFWS, Acting Assistant Regional Director to G. Larson, WS Eastern Regional Director, May 9, 2001) determined that, "Canada lynx are unlikely to be affected by using guard dogs, scare devices, oral rabies vaccine, and shooting." While the oral rabies vaccine is not a method identified by the NY WS program for use in white-tailed deer damage management, the other methods have been identified for potential use. This letter states that a "may affect, not likely to adversely affect" determination is appropriate for APHIS-WS operational programs, including those in New York.

Objectives

The objectives of the proposed action are to:

- In cooperation with the NYSDEC, respond to requests for assistance with the appropriate action (technical assistance or direct control) as determined by New York WS personnel, applying the ADC Decision Model (Slate et al. 1992).
- Hold the lethal take of nontarget animals by WS personnel during damage management to a negligible percentage of the total animals taken.

Major Issues

Several major issues were contained within scope of this EA. These issues were consolidated into the following 6 primary issues to be considered in detail:

- Effects on White-tailed Deer Populations
- Effects on Plants and other Wildlife Species, including Threatened and Endangered Species
- Effects on Human Health and Safety
- Humaneness of Methods to be Used
- Effects on Aesthetic Values
- Effects on Regulated White-tailed Deer Hunting

Alternatives

Five potential alternatives were developed to address the issues identified above. A detailed discussion of the anticipated effects of the alternatives on the issues are contained in the EA. The following summary provides a brief description of each alternative.

Alternatives analyzed in detail

Alternative 1. No Deer Damage Management by WS. This alternative would eliminate WS involvement in all deer damage management activities. WS would not provide direct operational or technical assistance and requesters of WS services would have to conduct their own deer damage management without WS input.

Alternative 2. Technical Assistance Only. This alternative would only allow New York WS to provide technical assistance to individuals or agencies requesting deer damage management.

Individuals might choose to implement WS lethal and non-lethal recommendations, implement methods not recommended by WS, use contractual services of private businesses, or take no action. Appendix D of the EA describes methods available for recommendation by WS under this alternative.

Alternative 3. Lethal Deer Damage Management only by WS. Under this alternative, WS would provide only lethal direct control services and technical assistance. Requests for information regarding non-lethal management approaches would be referred to NYSDEC, local animal control agencies, or private businesses or organizations. Individuals might choose to implement WS lethal recommendations, implement non-lethal methods or other methods not recommended by WS, contract for WS lethal direct control services, use contractual services of private businesses, or take no action. Appendix D of the EA describes lethal methods available for recommendation and use by WS under this alternative.

Alternative 4. Nonlethal Deer Damage Management only by WS. This alternative would require WS to use and recommend non-lethal methods only to resolve all deer damage problems. Requests for information regarding lethal management approaches would be referred to NYSDEC, local animal control agencies, or private businesses or organizations. Persons incurring deer damage could still resort to lethal methods or other methods not recommended by WS, use contractual services of private businesses that were available to them, or take no action. Appendix D of the EA describes a number of non-lethal methods available for recommendation and use by WS under this alternative.

Alternative 5. Integrated Deer Damage Management Program: Proposed Action/No Action (Preferred Alternative). Under this alternative, Wildlife Services would administer an Integrated Wildlife Damage Management (IWDM) approach to alleviate white-tailed deer damage to agriculture, property, natural resources, and human health and safety. An IWDM approach would be implemented on all private and public lands of New York where a need exists, a request is received, and funding is available. An IWDM strategy would be recommended and used, encompassing the use of practical and effective methods of preventing or reducing damage while minimizing harmful effects of damage management measures on humans, other species, and the environment. Under this action, WS would provide technical assistance and operational damage management, including non-lethal and lethal management methods by applying the WS Decision Model (Slate et al. 1992). When appropriate, habitat modifications, harassment, repellants, and physical exclusion could be recommended and utilized to reduce deer damage. In other situations, deer would be removed as humanely as possible by sharp shooting and live capture followed by euthanasia under permits issued by the NYSDEC. In determining the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or there could be instances where application of lethal methods alone would be the most appropriate strategy. Appendix D of the EA describes lethal and non-lethal methods available for recommendation and use by WS under this alternative. Deer damage management would be conducted in the state, when requested, on private or public property after an *Agreement for Control* or other comparable document has been completed. All

deer damage management would be consistent with other uses of the area and would comply with appropriate federal, state and local laws.

Alternatives considered but not in detail with rationale

Live Trap and Relocation. Under this alternative WS would capture deer alive using cage-type live traps or capture drugs administered by dart gun and then relocate the captured deer to another area. Numerous studies have shown that live-capture and relocation of deer is relatively expensive, time-consuming and inefficient (Ishmael and Rongstad 1984, O'Bryan and McCullough 1985, Diehl 1988, Jones and Witham 1990, Ishmael et al. 1995). Population reduction achieved through capture and relocation is labor intensive and would be costly (\$273-\$2,876/deer) (O'Bryan and McCullough 1985, Bryant and Ishmael 1991). Additionally, relocation frequently results in high mortality rates for deer (Cromwell et al. 1999, O'Bryan and McCullough 1985, Jones and Witham 1990, Ishmael et al. 1995). Deer frequently experience physiological trauma during capture and transportation, (capture myopathy) and deer mortality after relocation, from a wide range of causes within the first year, has ranged from 25-89% (Jones and Witham 1990, Mayer et al. 1993). O'Bryan and McCullough (1985) found that only 15% of radio-collared black-tailed deer that were live-captured and relocated from Angel Island, California, survived for one year after relocation. Although relocated deer usually do not return to their location of capture, some do settle in familiar suburban habitats and create nuisance problems for those communities (Bryant and Ishmael 1991). High mortality rates of relocated deer, combined with the manner in which many of these animals die, make it difficult to justify relocation as a humane alternative to lethal removal methods (Bryant and Ishmael 1991). Chemical Capture methods require specialized training and skill. A primary limitation of darting, the limited range at which deer can be effectively hit, is generally less than 40 yards. With modern scoped rifles, however, a skilled sharpshooter can hit the head or neck of a deer for a quick kill out to 200 yards and beyond. Thus, chemical capture is far less efficient, more labor intensive, and much more costly than lethal removal with rifles.

Translocation of wildlife is discouraged by WS policy (WS Directive 2.501) because of stress to the relocated animal, poor survival rates, potential for disease transfer and difficulties in adapting to new locations or habitats. Also many states no longer permit the interstate transfer of deer due to recent concerns of chronic wasting disease outbreaks (section 1.3.6, page 9). If CWD is already present in New York, relocating deer within the state could serve to vector the disease.

Population Stabilization Through Birth Control. Deer would be sterilized or contraceptives administered to limit the ability of deer to produce offspring. Contraceptive measures for deer can be grouped into four categories: surgical sterilization, oral contraception, hormone implantation, and immunocontraception (the use of contraceptive vaccines). Sterilization could be accomplished through surgical sterilization (vasectomy, castration, and tubal ligation), chemosterilization, and gene therapy. Contraception could be accomplished through hormone implantation (synthetic steroids such as progestins), immunocontraception (contraceptive vaccines), and oral contraception (progestin administered daily). These techniques would require that deer receive either single, multiple, or possibly daily treatment to successfully prevent conception.

Use and effectiveness of reproductive control as a wildlife population management tool is limited by population dynamic characteristics (longevity, age at onset of reproduction, population size and biological/cultural carrying capacity, etc.), habitat and environmental factors (isolation of target population, cover types and access to target individuals, etc.), socioeconomic and other factors. Population modeling indicates that reproductive control is more efficient than lethal control only for some rodent and small bird species with high reproductive rates and low survival rates (Dolbeer 1998). Additionally, the need to treat a sufficiently large number of target animals, multiple treatments, and population dynamics of free-ranging populations place considerable logistic and economic constraints on the adoption of reproduction control technologies as a wildlife management tool for some species. Research into reproductive control technologies, however, has been ongoing, and the approach will probably be considered in an increasing variety of wildlife management situations.

The use of this method would be subject to approval by Federal and State Agencies. This alternative was not considered in detail because:

- it would take a number of years of implementation before the deer population would decline and therefore, damage would continue at the present unacceptable levels for a number of years;
- surgical sterilization would have to be conducted by licensed veterinarians, and would therefore be extremely expensive;
- it is difficult, time-consuming, and expensive to effectively live trap, chemically capture, or remotely treat the number of deer necessary to effect an eventual decline in the population; and

State and Federal regulatory authorities have approved no chemical or biological agent for use as a deer contraceptive.

Finding of No Significant Impact.

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of implementing the proposed action and that these actions do not constitute a major Federal action. I agree with this conclusion and therefore find that an Environmental Impact Statement need not be prepared. This determination is based on the following factors:

- 1) White-tailed deer damage management as conducted by WS in the State of New York is not regional or national in scope.
- 2) Based on the analysis documented in the EA, the impacts of the proposed action will not significantly affect public health or safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).
- 3) The proposed action will not have a significant impact on unique characteristics such as park lands, wetlands, wild and scenic areas, or ecologically critical areas. Built-in

mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.

- 4) The effects on the quality of the human environment are not highly controversial. Although certain individuals may be opposed to managing white-tailed deer, this action is not controversial in relation to size, nature, or effects.
- 5) Mitigation measures adopted and/or described as part of the proposed action minimize risks to the public, prevent adverse effects on the human environment, and reduce uncertainty and risks. Effects of methods and activities, as proposed, are known and do not involve uncertain or unique risks.
- 6) The proposed action does not establish a precedent for future actions, including future white-tailed deer damage management that may be implemented or planned within the State.
- 7) The number of white-tailed deer that will be taken by WS annually is very small in comparison to regional and statewide populations. Adverse effects on other wildlife species and on wildlife habitat would be minimal. The EA discussed cumulative effects of WS on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
- 8) This action will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places and will not cause loss or destruction of significant scientific, cultural, or historic resources. WS wildlife damage management would not disturb soils or any structures and, therefore, would not be considered a "Federal undertaking" as defined by the National Historic Preservation Act.
- 9) WS determined that the proposed project would not adversely affect Federally or State listed threatened or endangered species in New York.
- 10) The proposed action is consistent with local, state, and Federal laws that provide for or restrict WS wildlife damage management. Therefore, WS concludes that this project is in compliance with Federal, state and local laws for environmental protection.

Decision and Rational

I have carefully reviewed the Environmental Assessment (EA) prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 5 (Integrated Deer Damage Management Program (Proposed Action/No Action)) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 5 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on

target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. Therefore, it is my decision to implement the proposed action as described in the EA. Copies of the EA are available upon request from the New York WS State Office, 1930 Route 9, Castleton, NY 12033-9653.



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USDA-APHIS-WS

2/6/03

Date

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